

MAP 6356 - Partial Diff Equa
MWF Period 2 (8:30am - 9:20 AM) Room:LIT0205

Instructor: Cheng Yu, Little Hall 306, chengyu@ufl.edu

Office Hours: M 9:30am-10:30am, Zoom on Friday 9:30am-10:30am, or make appointment.

Textbooks: Partial Differential Equations by Evans.

Prerequisites: Any graduate, advanced undergraduate students with strong backgrounds in analysis and ode.

Description: This course is designed for the graduate students from math and Engineering. In this course, we will discuss representation formulas for solutions to three different types of PDEs, a variety of topics in the first order nonlinear partial differential equation(s) and other ways to represent solutions. In particular, we will cover the following topics:

- a. Chapter 2: Four Important linear PDEs, Sections 2.1-2.4;
- b. Chapter 3: Nonlinear first-order PDE: Section 3.1, 3.2, 3.4;
- c. Chapter 4: Other ways to Represent solutions: Section 4.2-4.3.

Homework assignments: There will be several homework assignments. I will encourage students to discuss HW problems with your classmates or friends. But please write the solutions independently.

Exams: There will be one Mid-exam and one comprehensive final as follows

Midterm Exam: October 13.

Final Exam: announce later.

Grade Policy: Homework is 60 percent, mid exam is 20 percent, and final is 20 percent. The class participation will be considered in borderline grades. The grade scale is as follows:

A : [85, 100].

B : [75, 85).

C : [70, 75).

C-: [68, 70).

D : [60, 68).

F : [0, 60).

Students with Disabilities: Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing

appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Diversity and inclusion: I am committed to diversity and inclusion of all students in this course. I acknowledge, respect, and value the diverse nature, background and perspective of students and believe that it furthers academic achievements. It is my intent to present materials and activities that are respectful of diversity: race, color, creed, gender, gender identity, sexual orientation, age, religious status, national origin, ethnicity, disability, socioeconomic status, and any other distinguishing qualities.